# 66-20 Selective MicroClean (Project 01-71) (7/02) For UPDATE, click here.

Selective MicroClean is a chlorine dioxide-based dental unit waterline cleaner made for use in self-contained water systems. The manufacturer claims that the product eliminates odors, and removes mineral deposits and organic matter. The product uses a unique delivery system called "micro-reactor technology" to produce chlorine dioxide gas in solution. The cleaning solution is made using a semi-porous membrane pouch that contains a mixture of dry sodium chlorite and an activator. The pouch is heat-sealed inside a plastic bag with a screw-top lid. Tap water is poured into the bag via the screw-top lid. The water then surrounds the semi-porous pouch inside the bag and seeps inside the pouch. The solution is allowed to sit for 60 minutes for full activation before placement in the waterlines. This produces one liter of solution with a 50 parts-per-million (ppm) concentration of chlorine dioxide. The manufacturer recommends a two-step treatment protocol. For heavily contaminated systems, one liter of solution is pumped through the waterlines and allowed to remain



overnight. This is accomplished for 3 consecutive workdays. Thereafter, one-third liter of solution is pumped through the waterlines and allowed to remain overnight. The manufacturer recommends this last step be accomplished biweekly for maintenance.

#### Manufacturer:

Selective Micro Technologies 66 Cherry Hill Drive Suite 230 Beverly, MA 01915 (978) 927-6610 (978) 927-6088 FAX www.selectivemicro.com

Suggested Retail Price: \$15.95

Government Price: Price pending

## **ADVANTAGES:**

- + After treatment, dental unit water met American Dental Association (ADA) recommendations.
- + Easy to mix, place, and use.
- + Simple protocol to follow requiring only biweekly use for maintenance.
- + No clogging of waterlines was noted.
- + No detrimental effects to the dental unit were noted.
- + Innovative packaging system.
- + Can be mixed with tap water.
- + No offensive odor or aftertaste detected.

### **DISADVANTAGES:**

- More expensive than using diluted bleach for cleaning waterlines.
- Product requires mixing.
- Product requires 60-minute activation time prior to use.

## **SUMMARY AND CONCLUSIONS:**

Selective MicroClean is a chlorine dioxide-based dental unit water line cleaner that is mixed within a proprietary delivery system. During the test period, all tested water samples met the ADA goal for output treatment water. The product requires placing tap water within the packaging system followed by a 60-minute activation time. Manufacturer instructions recommend an overnight application (one liter of solution) for three consecutive days for heavily contaminated systems and biweekly use (one-third liter) for maintenance. Users rated its handling properties and clinical acceptability as "Good or Excellent." They also found the product easy to use and enjoyed the biweekly use time interval. The main shortcomings noted were its increased cost compared to diluted bleach, the need for mixing, and the need to wait 60-minutes before using. **Selective MicroClean** is rated **Acceptable** for use by the federal dental services.

### UPDATE

October 2008: DECS recently learned that Selective Micro is no longer selling Selective MicroClean.